

Abstract

The invention allows to create a transistor which can operate in both constant-voltage circuits and alternating-voltage circuits for example 120 volt and more (to some kilovolt), that is the transistor can be both closed and open with any polarity of a voltage on drain-source. It simplifies designing of many circuits and provides creating circuits which cannot be produced with any other types of transistors. Besides, the transistor has high technical characteristics: a high current density, a high switching power, a very low on-voltage. It provides applying the transistor for production, transfer and use of an electric energy. This is achieved by means of disposing elements of a bipolar static induction transistor: two gates, four sources, channels and six electrodes -- on either side of a lightly doped n-type silicon monocrystal substrate; besides one of the channels of multielement structure is thicker than the other channels; said thick channels is connected to a separate electrode.